UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/814,073	03/30/2004	Jose Renato Santos	100201443-2	5483

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EXAMINER
QURESHI, AFSAR M

ART UNIT	PAPER NUMBER
2616	

MAIL DATE	DELIVERY MODE
12/11/2007	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

PTOL-90A (Rev. 04/07)

		Application No.	**Applicant(s)**
Office Action Summary		10/814,073	SANTOS ET AL.
		Examiner	**Art Unit**	
		Afsar M. Qureshi	2616	

-- *The MAILING DATE of this communication appears on the cover sheet with the correspondence address* --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE *3* MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>02 October 2007</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) *1-20* is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) *1-20* is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☒ The drawing(s) filed on <u>30 March 2004</u> is/are: a)☐ accepted or b)☒ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892).

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date. _____ .

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

Response to Amendment

1.   This Office action is responsive to amendment and Remarks received on

10/02/2007. Applicant canceled claims 21-24.

Response to Arguments

2.   Applicant's arguments filed on 10/02/2007 have been fully considered but they

are not persuasive.

(i)   Applicant argued that cited reference Ha, US 7,136,353, teaches congestion

control mechanism by increasing the size of the congestion windows and directed to

col.- 6, lines 54-59. However, Ha referred to above mechanism as conventional TCP

architecture (col. 6, lines 38-64, figure 1, also, see Description of Related Art). Infact, Ha

anticipates both limitations, i.e., window limit and rate limit (see col. 3, lines 48 through

col. 4, lines 1-25) where a scheduler controls the rate limit and ensures that the data is

transmitted to the receiver at a rate that the communication channel can support.

        Examiner contends that Ha, clearly anticipates both limitations cited by the

Applicant.

(ii)   Examiner requested to insert descriptive label of blank boxes, of figure 1, for a

proper understanding of the invention (see MPEP 37 CFR § 1.83).

Drawings

3.   The drawings are objected to because they do not include **_descriptive labels_** for the reference numeral(s) **_104, 106, 108, 110, 112_** in the figure 1.

A proposed drawing correction or corrected drawings are required in reply to the Office action to avoid abandonment of the application. The objection to the drawings will not be held in abeyance.

4.   **The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.**

5.   Claims 1-20 are rejected under 35 U.S.C. 102(e) as being clearly anticipated by US patent No. 7,136,353 **Ha et al.** ("**Ha**").

Regarding claims 1, 13, 17   Ha teaches a method and system for controlling congestion in a communications network to improve quality of service comprising :

receiving congestion feedback data (response) relating to network (following TCP communication protocol),

adjusting at least one of a window limit and a rate limit based on congestion feedback data (inherently in well known in TCP communication protocol dealing with window size and rate limit wherein TCP communication protocol participates in congestion control by setting a value that dictates the maximum congestion window size before the growth rate of the congestion window size slows down), and injecting data packets onto network according to window limit and rate limit (conventional TCP

protocol) (See Fig. 1, col. 3, lines 48 through col. 4, lines 1-25, also, Col. 6, lines 38-64).

Regarding claims 2, 14 and 18. Ha further teaches decreasing rate limit and window limit if network is determined to be congested based on congestion feedback data (See Fig. 5B, step 522, Col. 10, line 64 to Col. 11, line 28).

Regarding claims 3, 15, and 19, Ha further teaches increasing, based on a limiting factor, at least one of rate limit and window limit if network is determined not to be congested based on congestion feedback data (See Fig. 5B, step 516, Col. 10, line 64 to Col. 11, line 28).

Regarding claims 4, 16 and 20, Ha further teaches that the limiting factor is determined based on whether the transmission of a data packet was most recently limited by at least one of rate limit and window limit (See Fig. 6, step 612, Col. 12, line 57 to Col. 13, line 28).

Regarding claims 5 and 11, Ha teaches that only rate limit is increased if limiting factor is determined by rate limit (where rate limit may be independent controlled) (See Fig. 6, step 612, Col. 13, lines 28-55).

Regarding claims 6 and 10, Ha further teaches that only window limit is increased if limiting factor is determined by window limit (See Fig. 5B, step 516, Col. 10, line 64 to Col. 11, line 28).

Regarding claims 7-9 and 12, Ha further teaches that limiting factor is a value between a predetermined high threshold and a predetermined low threshold and adjusting size of the packet size (congestion window controlled by sum of all connection adjustable by host-level variable in predefined range) (See Fig. 2, Col. 7, line 33 to Col. 8, line 6).

6.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

7.   Any inquiry concerning this communication or earlier communications from the examiner should be directed to Afsar M. Qureshi whose telephone number is (571) 272 3178. If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Field Lynn can be reached on (571) 272 2092. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent

Application Information Retrieval (PAIR) system. Status information for published

applications may be obtained from either Private PAIR or Public PAIR. Status

information for unpublished applications is available through Private PAIR only. For

more information about the PAIR system, see http://pair-direct.uspto.gov. Should you

have questions on access to the Private PAIR system, contact the Electronic Business

Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO

Customer Service Representative or access to the automated information system, call

800-786-9199 (IN USA OR CANADA) or 571-272-1000.

AFSAR QURESHI
PRIMARY EXAMINER

12/6/2007